

REMARKS

Claims 1-14 are pending in the application. Claims 1 and 8 are independent claims.

In the Office action¹, the Examiner rejected claims 1-12 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,293,578 to Nagami ("*Nagami*") in view of U.S. Patent 5,388,159 to Sakata ("*Sakata*"). The Examiner also rejected claims 13-14 under 35 U.S.C. § 103(a) in view of *Nagami*, *Sakata*, and U.S. Patent 4,901,150 to Klingelhofer et al. ("*Klingelhofer*").

Applicants respectfully traverse the rejection of claims 1-14. Even if combinable as suggested by the Examiner, *Nagami* and *Sakata* fail to disclose or suggest the claimed subject matter. For example, independent claims 1 and 8 recite *inter alia*,

A noise reduction apparatus which reduces a noise level of noise contained in an input signal, comprising...

an adjusting device which adjusts the level of the input signal that does not pass the high pass filter on the basis of the first control signal;

a reducing device which reduces a level of the adjusted input signal in accordance with a predetermined reducing characteristic and generates the reduced adjusted signal; and

a restoring device which restores the level of the reduced adjusted signal to the original level of the input signal on the basis of the second control signal.

Nagami does not disclose the claimed noise reduction apparatus. On page 3 of the Office action, the Examiner states that *Nagami* discloses,

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

an adjusting device (1, 2) which adjusts the level of the input signal that does not pass the high pass filter on the basis of the first control signal (arrow to 2 (delaying means)), a reducing device (4), which reduces a level of the adjusted input signal in accordance with a predetermined reducing characteristic (such as factor) and generates the reduced adjusted signal, and a restoring device (51 and 3(processor)) which restores the level of the reduced adjusted signal to the original level of the input signal on the basis of the second control signal (arrow to 4(amplifier))(see col. 3 line 32-col. 6, line 9).

Nagami discloses at column 3, lines 35-42, a noise reducing device (Figure 5) having a noise silencing device ("51"), "which includes a delaying means 2 for delaying a phase of the noise wave, an amplifying means 4 for adjusting a gain of the delayed noise wave, and a means 15 for superposing the delayed noise wave as the noise silencing wave on the original noise wave." *Nagami* further discloses at column 3, line 56 to column 4, line 2, that the noise wave is separated by a plurality of "band pass filters 1", delayed by "delaying means 2", amplified by "amplifying means 4", and outputted through "processor 3", resulting in a noise silencing signal (S_{out}). *Nagami* discloses at column 3, lines 49-52, "controlling means 54" which controls "at least one of the delaying means 2 and amplifying means 4 utilizing the selected delaying factor and gain factor, respectively."

The device in *Nagami* fails to teach the claimed adjusting device "which adjusts the level of the input signal that does not pass a high pass filter on the basis of the first control signal." *Nagami* discloses band pass filters (BPFs 1) and delaying means (2), but these do not adjust the level of an input signal that does not pass a high pass filter on the basis of the first control signal. As admitted by the Examiner on Page 3 of the Office action, *Nagami* fails to disclose a high pass filter.

The device in *Nagami* also fails to teach the claimed reducing device, “which reduces a level of the adjusted input signal in accordance with a predetermined reducing characteristic and generates the reduced adjusted signal.” *Nagami* discloses “amplifying means 4,” but these do not “reduce the level of the adjusted input signal.” *Nagami* does not teach the “adjusted input signal” since it fails to teach a “high pass filter”, as admitted by the Examiner on Page 3 of the Office action.

Nagami fails to disclose the claimed restoring device which “restores the level of the reduced adjusted signal to the original level of the input signal on the basis of the second control signal.” *Nagami* discloses a “processor 3,” but this does not restore the level of the “reduced adjusted signal”, because *Nagami* does not teach the “adjusted input signal.”

Sakata also fails to disclose the claimed noise reduction apparatus. *Sakata* discloses at column 10, lines 31-36, an “audio signal equalizing circuit” including a “high pass filter 61.” The circuit disclosed by *Sakata*, however, does not disclose the claimed noise reduction apparatus comprising an “adjusting device”, a “reducing device” or a “restoring device” as recited in independent claims 1 and 8.

Neither *Nagami* nor *Sakata* disclose the noise reduction apparatus which reduces a noise level of noise contained in an input signal as recited in independent claims 1 and 8. Therefore, the subject matter of claims 1 and 8 would not have been obvious to one of ordinary skill in the art in view of *Nagami* and *Sakata*. Accordingly, for at least these reasons, Applicants respectfully request that the Examiner withdraw the rejection of claims 1 and 8 under 35 U.S.C. § 103(a).

Applicants further submit that claims 2-7 and 9-12 depend from one of the independent claims 1 and 8, and are therefore allowable for at least the same reasons that independent claims 1 and 8 are allowable. In addition, each of the dependent claims may recite unique combinations that are neither taught nor suggested by prior art.

Applicants respectfully traverse the rejections of claims 13-14 under 35 U.S.C. § 103(a). Claim 13 depends from claim 1, while claim 14 depends from independent claim 8. Applicants respectfully submit that *Klingelhofer* does not repair the deficiencies of *Nagami* and *Sakata*, and claims 13-14 are patentable for at least the same reasons as independent claims 1 and 8.

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.


Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.



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By: Reg. No. 33,921



David W. Hill
Reg. No. 28,220